

the South. At the same time the positive height center off the west coast was proceeding northwestward.

As the negative DN diminished in the Southern Plains a new negative center appeared near Baffin Island. By the third week this DN weakened somewhat and was located in Idaho. Meanwhile the positive height anomaly reached a maximum of +1350 ft. in Alaska. Blocking was strongest, very cold air occupied the Northern Plains, and cooling was taking place in the West.

It should be noted that the West became coldest after the positive DN reached its peak in Alaska. There was a similar lag in the maximum negative value (-390 ft.) that occurred January 20–24 at 34° N., 122° W.

By the end of the month the positive DN re-entered

the Pacific Northwest where warming was in progress and the negative center became quite weak near 23° N., 115° W.

REFERENCES

1. R. A. Green, "The Weather and Circulation of December 1961—Strong Blocking at High Latitudes," *Monthly Weather Review*, vol. 90, No. 3, Mar. 1962, pp. 121–126.
2. W. H. Klein and J. S. Winston, "Geographical Frequency of Troughs and Ridges on 700-mb. Charts," *Monthly Weather Review*, vol. 86, No. 9, Sept. 1958, pp. 344–358.
3. U. S. Weather Bureau, *Climatological Data—National Summary*, vol. 13, No. 1, Jan. 1962, Chart IX.
4. U. S. Weather Bureau, *Weekly Weather and Crop Bulletin, National Summary*, vol. XLIX, Nos. 2–6, Jan. 8, 15, 22, 29, and Feb. 5, 1962.

Weather Note

COLD WAVE OF JANUARY 8–11, 1962 IN MONTANA

R. A. DIGHTMAN

Weather Bureau Airport Station, Helena, Mont.
[Manuscript received January 29, 1962]

A few interesting particulars on the phenomenal weather development during January 8–11, 1962 as it affected Montana are:

(1). Helena observed the highest sea level and station atmospheric pressure recorded since April 1, 1880—nearly 83 years. Reduced to sea level, the pressure was 1063.3 mb. (31.40 in.), and the station pressure stood at 26.855 in. Previously the highest since 1880 had been 1054.9 mb. (31.15 in.) in November 1959.

(2). Lowest temperature observed for the State (as this is written, Jan. 11, 1962) was -55° F. at West Yellowstone, January 10. Other minima currently

available show -44° at Butte on the 9th, -47° at Drummond on the 10th, and -42° at Belgrade on the 9th. In fact, the entire State appears to have been well below zero on both the 9th and 10th.

(3). The strong westerly surface winds that developed along eastern slopes on the 10th, and which continued on the 11th, failed to produce the rapid warming usually experienced under such conditions—attesting to the unusual coldness of the air mass as a whole. In fact, over 30 hours after the wind had started, only a few points had warmed to 32° F. Much blowing and drifting snow accompanied the wind.